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ABSTRACT OF THE DISCLOSURE

A swing measurement method of directly measuring a swing behavior without being influenced by flexure of an impact implement, such as a golf club or baseball bat is provided. In addition, a golf swing analysis method and computer program product having computer program code for a simple and effective model of the behavior of a grip portion during a golf swing is provided. A three dimensional magnetic sensor capable of measuring position and direction is fixed to a grip portion of the impact implement within magnetic fields in which the magnetic field distribution of intensity and direction are known, and the behavior of the swing is directly measured. In addition, the path of the grip portion is approximated as an arc within a swing plane using the three dimensional position coordinates of the grip portion obtained in this measurement, and thus an arm angle, a wrist angle, and an angle of shaft rotation are found. The time sequence data of the wrist angle and the time sequence data of the shaft rotation angle, with respect to the time sequence data of the arm angle are plotted and the swing behavior is analyzed.